

HACKS



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Studium Omnibus Habendum Est

July 1987

Best Foot Forward

by John King Tarpinian

Our September issue of H.A.C.K.S. will be the one that is handed out to exhibitors and attendees at the Southern California ATARI Computer Faire, Version 2.0. Why should you care? Because this issue will be the one that many people will use to compare us against other clubs nationwide.

Thanks to Kitts and Lew we have the best looking newsletter there is. But, looks ain't everything. (You don't know how many times I have used that line, unsuccessfully.) We need contents. Please, if you have any literary talent at all show it.

We cannot depend on Alan, Ross and the other regular contributors all the time. If you write only once this year, please write it now. When are the articles due? Yesterday. Actually the deadline is August 1st. So get cracking, please.

Something to Do

by rootbeers

Sometimes a good way to learn to program in a language is to translate a short program from a book. I think it was David Ahl who compiled "101 BASIC Computer Games" which is where some of my friends learned to program in high school. Mind you, the programs didn't always work the first time, but it served to give you an idea of something to do and a starting point.

Anyway, I was doing some research a few days ago (trying to answer the musical question: "What are the three common English words which end in -gry?" when I came across "Create Word Puzzles with Your Microcomputer" by Ernest E. Mau. Thumbing through it I was struck by a number of things.

First of all, these programs were written for professional purposes; Ernie used them at some point to try to make money. Second, and more importantly, an integrated approach was taken. All of the programs use the same set of files to generate their specific puzzle. What this means to the novice is that some programs will be used to edit the word lists and puzzle programs

will use the generated word lists. If you are interested in learning file accessing techniques, this might be a good place to start. The preface claims 17 programs which produce 25 types of puzzles, which is quite a bit of variety. In addition, each puzzle can be printed with and without answers, just as if you were going to send them to a publisher.

The bad news is that these programs were not written for the Atari, so the amount of translation required may be quite high, but usually that's a simple learning curve—you learn the equivalent expressions on the Atari, and then it's just a matter of direct conversion. The book was published in '82, I found it in a library (GV 1507 .W8 M38). If puzzles and programming are your interest, by all means check it out.

Programming Finesse

by rootbeers

One question software engineers are trying to resolve is how to cut down on the costs of producing software. As the cost of hardware plummets, so the cost of larger and larger software projects soars. Faster processors mean larger programs.

One of the key concepts is known as modularity. Take a programming task and do it once, do it right, and do it so that it doesn't involve anything it doesn't need, then always use that code when you need that task done. Note that this is an easy thing to do if you write in a language that supports this kind of thinking.

Another key concept is the idea of readability. A program is written only once but it is read many times. Structured programming is really an attempt at this. Standardize the control structures so everyone can agree where a loop begins and ends, etc. Combine the idea of readability with modularity, and you can read through a module, and once you have verified that it does what it's supposed to do, you can check it off as correct and never think about it again, at least in theory.

So far though, these are ideas we can enforce or encourage in the language, but I'm sure

many of you have seen structured modular code you could not make head or tail of if you were given a million dollars and a year's time. So then software engineers had to decide how to impose arbitrary restrictions on programmers in an effort to write more readable code. Such vile things as "documentation". Where I work, if you need to know how something is done, you look at the code, because that is the definitive answer. Consequently, any documentation of a routine consists of the comments in the code and that's about it. But documentation doesn't quite fit the bill when the code itself is garbage, so on large projects there is now an attempt to limit the size of the software modules.

One approach is to put a fixed limit on the number of lines in a module, commonly to one screen or printed page. I happen to dislike that notion because it promotes NOT putting in blank lines, which increases readability. Also, the poor programmer who needs to put in one extra line when there is no room gets the task of splitting the routine into two new routines.

The best idea I have heard of comes from analysis of the code written by hot-shot programmers and the idea fits in nicely with the concept of modularity. The idea is that a module should perform only one task. Length is not at stake here, and yet, a four-page routine that only does one task is rare. The term coming in vogue for this "singleness of purpose" is "strength".

So when you program, whether the program is large or small, remember to do all the normal commenting and whatnot that you normally do, but now add the ideas of modularity and strength to the list of things you think about when you program under the heading of "readability". Someday you will hunt down a program you wrote six years previous and you'll be glad you kept these concepts in mind. Readability and documentation are like castor oil—you don't drink it because you like the taste, but because it's good for you.



The President's Corner

by John King Tarpinian

Last month I asked for a volunteer to lead an ST Graphics SIG. Well, I got lucky. And it has been a while. Mike Malloy has volunteered to run the SIG. This SIG will normally be held the FIRST Tuesday of the month. It will be at the same place as the other three SIGs, Logical Choice. The meeting will begin, promptly, at 7:00 PM.

You know what they say about I before E, except after C. Well, this applies to our first ST Graphics SIG. Mike is going on vacation the first week in July and will not be able to prepare a meeting by the first Tuesday. Soooooo, the meeting will be on *Thursday* the 16th. After this meeting we will revert back to our first Tuesday schedule that we have not had yet.

With the addition of the ST Graphics SIG we now have five meetings a month. A quick review is: 1st Saturday—General Meeting, 1st Tuesday—Graphics SIG (except this month), 2nd Tuesday—ST SIG, 3rd Tuesday—6502 SIG,

4th Tuesday—MIDI SIG. That is about ten hours a month of meetings.

The 6502 SIG will slow down someday. When it dies out we will either move the Graphics SIG to that spot or, if I get someone to lead an XL/XE SIG, then we will make that the 3rd Tuesday of the month. You people are lucky that conscription is not allowable. Do I see someone taking two steps forward? I hope so. Not to repeat myself but, we MUST look to ourselves for 8-bit support.

We had an ACENET meeting last month. The Southern California ATARI Computer Faire, Version 2.0 is going forward very smoothly. Now you men out there do not have to do what I did last year. Which was to send the little woman to

the Virgin Islands during the Faire. But make sure you have the lawns mowed and the garage cleaned out by September 19th and 20th. Maybe a trip to her mother's, with the kids, is order for that weekend?

This month is our tri-annual Swap Meet. Remember the rules. Originals only, with manuals. At 300 pounds I do not that that last statement lightly.

June 19th & 20th is/was the World of ATARI show in Santa Clara. This event was, as will be our show, cosponsored by ATARI and the local users groups. I plan on giving a slide show blow by blow of the show.

See you at the meetings.

ST MIDI SIG

by Ben Di Tosti

The 2nd H.A.C.K.S. ST-MIDI SIG meeting took place on the last Tuesday of May at Logical Choice for Computing. Those attending were treated to a demonstration of some rather innovative music software developed by the fast-rising company, COMPU-MATES, who design and implement truly easy-to-use programs. Founder Charles Faris, who incidentally is a record producer with 36 platinum to his credit, stated that his company would continue to design music software for the ST, which would allow all musicians to ease into the creative use of his/her midi-studio setup.

Current COMPU-MATES products demoed were:

Kawaii R100 DRUMDROID—an editor/librarian for the Kawaii tuneable drum machine which facilitates creation & storage of drum patterns and tracks.

Kawaii K-3 SYNTHDROID—a wave table/patch editor and librarian for both the K3 and K3M synths.

Korg DSS-1 SYNTHDROID—a waveform sampler editor/patch librarian.

GEN-PEDALS—a really useful program that provides for midi reassignment of your pedal controllers such as volume, modulation, pitch bend etc. For example, one pedal might start as a volume control device, and at bar 9 it would convert to pitch bend.

All of the above programs run under an accelerated version of the ST's easy to use GEM environment with the following features: controls are completely mouse-driven with pop-down menus for easy access to all of the program functions. The user can paint waveforms of harmonic attributes and immediately hear the result in real time! Neat! In addition, artificial intelligence droid patterns or sounds can be mouse-clicked instantly and those that sound useful can be stored to disk

for later retrieval and manipulation. The author claims resultant patches are 95% usable.

Kudos to COMPU-MATES for NOT copy protecting their software, thus allowing for the convenience of hard disk and ram drive use. Unfortunately, some of the competition has yet to get the message. Dr. T goes so far as to warn their customers that any attempt to copy their programs may result in damage to their disk drives. So much for "worm-ware!"

The learning curve of COMPU-MATES' music programs appears to be considerably briefer than other software products I've worked with, and you won't believe the speed of these productive program tools. I can't wait to see their FINAL TRAK ST (sequencer) & FINAL SCORE (real-time scoring tool) which will be announced at the NAMM show in June.

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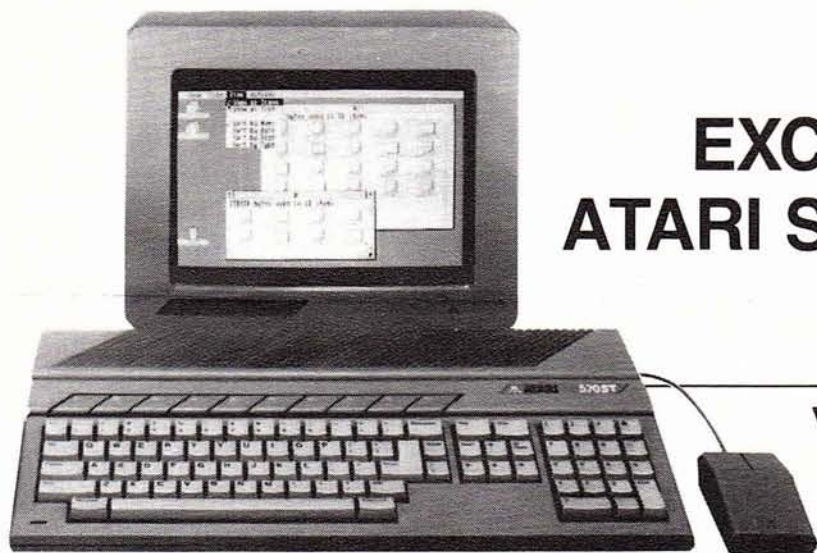
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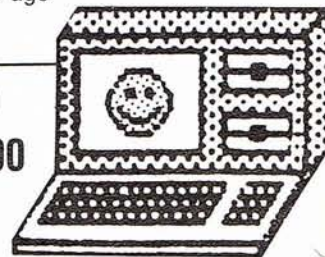
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QUALITY SERVICE WITH INTEGRITY—WE CARE

Panorama City Mall

Your club has been given booth space at the Panorama City Mall computer show. The show will be Saturday & Sunday, July 18 & 19. Your president does not want to sit there by himself. He would enjoy anybody's company.

Slide Show (Yawn) in July

Your president will be showing slides from the World of ATARI show in Santa Clara. Expect to see all types of candid shots. No, there will be no slides of ex-presidential candidates and their paramours.

A Month of Tuesdays

What, another one? Mike Malloy has volunteered to lead an ST Graphics SIG. Come see Mike make grass with DEGAS Elite. Starting in August this meeting will be on the first Tuesday of the month. But due to a vacation beyond my control this meeting will be on THURSDAY, July 16th. The Second Tuesday is our general ST SIG. Our main topic will be telecommunications. The Third Tuesday is for you people wanting to learn 6502 programming. Mark has kept you captivated for some time. Come and be mesmerized. The Fourth Tuesday is the MIDI SIG. Good ole Hybrid Arts will be showing off all the new and completed stuff they had at NAMM. ALL of our Tuesday night meetings are held at 7:00 PM at Logical Choice, 6116 Lankershim Bl., one block south of Victory in the Safeway shopping center.



**ATARI
COMPUTER
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NETWORK**

CHARTER MEMBER

July Meetings Schedule

SUN MON TUE WED THU FRI SAT

			1	2	3	4 HOLIDAY
5	6	7	8	9	10	11 GENERAL MEETING IN BURBANK
12	13 ST SIG	14	15	16 GRAPHICS SIG	17	18
19	20 6502 PROGRAMMING CLASS	21	22	23	24	25
26	27 MIDI SIG	28	29	30	31	

August Meetings Schedule

SUN MON TUE WED THU FRI SAT

						1 GENERAL MEETING
2	3	4 GRAPHICS SIG	5	6	7	8
9	10	11 ST SIG	12	13	14	15
16	17	18 6502 PROGRAMMING SIG	19	20	21	22
23	24	25 MIDI SIG	26	27	28	29
30	31					

What...Again?

So, our general meeting will be on the second Saturday of the month. Why, because the first Saturday is the 4th. Yes, THE FOURTH. So expect us to return to our normal schedule in August, I hope. The meeting is still at the Golden Mall Pavilion, 200 N. Golden Mall, in Burbank. Doors open at 10:00 AM and the meeting starts promptly at 10:36 AM.

Second Tri-Annual Swap Meet

Yes friends, it is time to get rid of the dumb software that you could not live without not too long ago. Rules are rules. Only ORIGINALS with their documentation will be allowed. Anyone caught doing anything otherwise will be formatted!!!

Southern California ATARI Computer Faire

We will need volunteers to help. Now don't step over somebody getting in line to sign up. Be patient. There is enough work for you, you, you and even you. Remember this is Version 2.0 and that means it will be better than last year. ght???



Do We Still Need a General Meeting?

by John King Tarpinian

One of our members asked me this question the other day. The only answer I could come up with, at the time, was that we had to have one because it was traditional. I thought about my answer for a while and could not come up with any other answer. Do we need the General Meeting anymore?

Let us think this through. We have a general meeting the first Saturday of each month. We are lucky enough to have guest speakers ten out of twelve months. Most of the guest speakers are ST oriented. This is also the meeting at which we give out the fabulous door prizes. We then have four Special Interest Group (SIG) meetings a month on Tuesdays. Three are for the ST and one is for the XL/XE.

That makes five meetings a month. I am noticing a drop off in general meeting attendance and an increase in SIG attendance. The majority of new memberships are coming from the ST meetings. Our club is still growing at about five percent a month. With normal attrition this is a very healthy growth rate.

Our XL/XE meeting is currently going over 6502 programming. This class is winding down and I have not gotten a volunteer to lead a general XL/XE SIG. If I cannot get a volunteer this SIG will cease to exist. This means that the only real information for the 8-bitters will come from the General Meeting. I hope this does not happen. I am sure that you XL/XE owners enjoy having a meeting you can call your very own. Please take one step forward.

As far as the ST-SIGs go they are doing very well. We are starting a Graphics SIG this month. We have the General ST-SIG. This is where we get the majority of our new members from. And the MIDI SIG is a unique animal. If I can get the musicians to show up on time we could end the meetings before midnight. We have gold and platinum album winners in attendance. Not to mention our humble

Grammy-winning SIG leader.

Please think about what I have said here. Do we need the General Meeting? If yes, please give me some ideas on how to revitalize the meeting. As always, I ask you what you want and the silence is deafening. Please roar a little.

